

What is claimed is:

1. A method for configuring and testing therapy parameters for a treatment of a nervous system disorder with a medical device system, the medical device system being in a manual treatment therapy mode, the method comprising:

(a) receiving a first set of information from a user, the first set of information being associated with a first treatment therapy configuration;

(b) assessing whether the first set of information is within a range of safety;

(c) applying a first treatment therapy to a patient in accordance with the first set of information;

(d) if the first treatment therapy is not safe, executing a corrective action;
and

(e) if the first treatment therapy is safe, storing the first set of information for subsequent use.

2. The method of claim 1, wherein (d) comprises:
preventing re-delivery of the first treatment therapy.

3. The method of claim 1, wherein (d) comprises:
terminating the first treatment therapy.

4. The method of claim 1, further comprising:
(f) receiving an indication from the user whether the first treatment therapy is tolerable to the patient; and
(g) if the first treatment therapy is not tolerable, executing a corresponding action.

5. The method of claim 1, further comprising:
(f) applying a subsequent treatment therapy in accordance with the first set of information.

6. The method of claim 1, further comprising:
 - (f) associating a first label with the first set of information.
7. The method of claim 6, further comprising:
 - (g) receiving the first label from the user; and
 - (h) applying a subsequent treatment therapy in accordance with the first label.
8. The method of claim 6, further comprising:
 - (g) receiving another set of information from the user, the other set of information being associated with another treatment therapy configuration;
 - (h) associating another label with the other set of information; and
 - (i) comparing the first set of information and the other set of information;.
9. The method of claim 8, further comprising:
 - (j) if the other treatment therapy configuration is essentially unique, storing the other set of information and the other label.
10. The method of claim 8, further comprising:
 - (j) if the other treatment therapy configuration is not essentially unique, outputting a notification to the user.
11. The method of claim 8, further comprising the step of:
 - (j) if the other treatment therapy configuration is not essentially unique, rejecting the second set of information..
12. The method of claim 1, wherein the first treatment therapy configuration comprises at least one attribute selected from the group consisting of an electrode configuration, a stimulation parameter, a test treatment therapy level, an indication about safety to the patient, and a level of tolerability by the patient.

13. The method of claim 12, wherein the stimulation parameter is selected from the group selected from a voltage level of a stimulation pulse, a pulse width of the stimulation pulse, a duration of a stimulation pulse train, a polarity configuration of electrodes, a set of electrodes that is used, and a stimulation frequency.

14. The method of claim 1, wherein the first set of information comprises a voltage level of a stimulation pulse, a pulse width of the stimulation pulse, and a configuration of electrodes designating a set of electrodes, the set of electrodes comprising an electrode, the method further comprising:

(f) determining a surface area of the electrode;

(g) determining a charge density that is associated with the electrode; and

(h) if the charge density is greater than a predetermined threshold, rejecting the first set of information in order that the first treatment therapy corresponding to the first set of information is not delivered to the patient.

15. The method of claim 14, wherein the charge density is approximately equal to a current multiplied by the pulse width of the stimulation pulse divided by the surface area of the electrode.

16. The method of claim 15, wherein the current is approximately equal to the voltage level of the stimulation pulse divided by an impedance of the set of electrodes.

17. The method of claim 1, further comprising:

(f) transitioning operation to a run mode;

(g) receiving a subsequent set of information from the user, the subsequent set of information being associated with a subsequent treatment therapy configuration; and

(h) if the first treatment therapy is not acceptable and if the subsequent set of information corresponds to a subsequent treatment therapy that exceeds a corresponding level of tolerance associated with the first treatment therapy, rejecting the subsequent set of information.

18. The method of claim 1, wherein the treatment utilizes drug infusion.
19. The method of claim 18, wherein the first input value is selected from the group consisting of a drug type, a drug dosage, at least one infusion site, an infusion rate, and a time of delivering the drug dosage.
20. The method of claim 1, wherein the nervous system disorder is selected from the group consisting of a disorder of a central nervous system, a disorder of a peripheral nervous system, a mental health disorder, and psychiatric disorder.
21. The method of claim 20, wherein the nervous system disorder is selected from the group consisting of epilepsy, Parkinson's disease, essential tremor, dystonia, multiple sclerosis (MS), anxiety, a mood disorder, a sleep disorder, obesity, and anorexia.
22. The method of claim 1, wherein the first treatment therapy is selected from the group consisting of electrical stimulation, magnetic stimulation, drug infusion, and brain temperature control.
23. The method of claim 1, wherein the first treatment therapy is provided to a location of a body selected from the group consisting of a brain, a vagal nerve, a spinal cord, and a peripheral nerve.
24. The method of claim 1, wherein the medical device system is selected from the group consisting of an external system, an implanted system, and a hybrid system.

25. An apparatus for configuring and testing therapy parameters for a treatment of a nervous system disorder with a medical device system, the apparatus comprising in combination:

- a user interface;
- a treatment therapy module;
- a memory; and
- a processor that is connected to the user interface in order to receive a command from a user and to send a response to the user and that instructs the treatment therapy module, the processor configured to perform:
 - (a) receiving a first set of information from the user through the user interface, the first set of information being associated with a first treatment therapy configuration;
 - (b) assessing whether the first set of information is within a range of safety;
 - (c) applying a first treatment therapy to a patient through the treatment therapy module in accordance with the first set of information;
 - (d) if the first treatment therapy is not safe, executing a corrective action; and
 - (e) if the first treatment therapy is safe, storing the first set of information in the memory, wherein the first set of information is accessible for a subsequent treatment therapy.

26. The apparatus of claim 25, wherein the processor is configured to perform:

- (f) receiving an indication from the user whether the first treatment therapy is tolerable to the patient; and
- (g) if the first treatment therapy is not tolerable, executing a corresponding action.

27. The apparatus of claim 25, wherein the processor is configured to perform :

- (f) associating a first label with the first set of information.

28. The apparatus of claim 27, wherein the processor is configured to perform:
- (g) receiving another set of information from the user, the other set of information being associated with another treatment therapy configuration;
 - (h) associating another label with the other set of information; and
 - (i) comparing the first set of information with the other set of information.
29. The apparatus of claim 28, wherein the processor is configured to perform:
- (j) if the other treatment therapy configuration is essentially unique, storing the other set of information and the other label.
30. The apparatus of claim 28, wherein the processor is configured to perform:
- (j) if the other treatment therapy configuration is not essentially unique, outputting a notification to the user.
31. The apparatus of claim 28, wherein the processor is configured to perform:
- (j) if the other treatment therapy configuration is not essentially unique, rejecting the second set of information.
32. The apparatus of claim 25, wherein the first set of information comprises a voltage level of a stimulation pulse, a pulse width of the stimulation pulse, a frequency of stimulation pulses, a duration of a stimulation pulse train, and a configuration of electrodes, the configuration of electrodes corresponding to a set of electrodes, the set of electrodes comprising an electrode, and wherein the processor is configured to performs:
- (f) determining a surface area of the electrode;
 - (g) determining a charge density that is associated with the electrode;
- and
- (h) if the charge density is greater than a predetermined threshold, rejecting the first set of information in order that the first treatment therapy corresponding to the first set of information is not delivered to the patient.

33. The apparatus of claim 25, wherein the processor is configured to perform:
- (f) transitioning operation to a run mode;
 - (g) receiving a subsequent set of information from the user through the user interface, the subsequent set of information being associated with a subsequent treatment therapy configuration; and
 - (h) if the first treatment therapy is not acceptable and if the subsequent set of information corresponds to a subsequent treatment therapy that exceeds a corresponding level of tolerance associated with the first treatment therapy, rejecting the subsequent set of information.
34. A computer-readable medium having computer-executable instructions for performing the method recited in claim 1.
35. The computer-readable medium having computer-executable instructions for performing the method recited in claim 4.
36. The computer-readable medium having computer-executable instructions for performing the method recited in claim 5.
37. A computer-readable medium having computer-executable instructions for performing the method recited in claim 8.